

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the present application:

1. (Currently amended) A method comprising:

~~establishing an audio-based~~ a speech-based dialog between a person and a machine ~~during a call~~, wherein the person uses a communication device to ~~communicate with~~ speak to the machine via a communication channel during the call;

~~automatically detecting a characteristic during the dialog in real time, wherein the~~
characteristic is a characteristic of the person, the communication device, the communication
channel, or an environment in which the person is located during the dialog, but the
characteristic is not uniquely indicative of any of; does not uniquely identify the identity of the
person, the identity of the communication device, or any user account; and

~~customizing the dialog at an application level, based on the detected characteristic~~
selecting a destination to which the call should be routed, based on the detected characteristic,
and not based on the meaning of any speech or the failure to recognize any speech during the
dialog.

2. (Canceled)

3. (Currently amended) A method as recited in claim 21, wherein the characteristic is an approximate age of the person.

4. (Currently amended) A method as recited in claim 21, wherein the characteristic is the gender of the person.

5. (Original) A method as recited in claim 1, wherein the characteristic is a type of speech being spoken by the person.
6. (Original) A method as recited in claim 1, wherein the characteristic is an emotional state of the person.
7. (Original) A method as recited in claim 1, wherein the characteristic is indicative of the truthfulness of speech of the person.
8. (Original) A method as recited in claim 1, wherein the characteristic is an acoustic characteristic.
9. (Original) A method as recited in claim 1, wherein the characteristic is indicative of a speech level of the dialog.
10. (Original) A method as recited in claim 1, wherein the characteristic is indicative of a noise level.
11. (Original) A method as recited in claim 10, wherein the characteristic is indicative of an acoustic noise level of the dialog.
12. (Original) A method as recited in claim 10, wherein the characteristic is indicative of a signal noise level of the dialog.
- 13-14. (Canceled)
15. (Currently amended) A method as recited in claim ~~44~~1, wherein the characteristic is a noise level of an acoustic environment in which the person is located.

16. (Currently amended) A method as recited in claim ~~43~~ 15, wherein the characteristic is a noise type of ~~the~~ an acoustic environment in which the person is located.

17. (Currently amended) A method as recited in claim ~~43~~ 15, wherein the characteristic is the level of reverberance of ~~the~~ an acoustic environment in which the person is located.

18. (Original) A method as recited in claim 1, wherein the characteristic is descriptive of a reason the person is experiencing an error.

19. (Original) A method as recited in claim 1, wherein the characteristic is a type of communication device the person is using to communicate with the machine.

20-28. (Canceled)

29. (Currently amended) A system comprising:

a front end to generate a set of features in response to speech from a person during a dialog with the person, wherein the person uses a communication device ~~to carry out the dialog~~ during a call communicate with the system via a communication channel;

a set of models;

a speech recognition engine to recognize the speech from the person based on the features and the models;

a characteristic detector to detect a characteristic of the person, the communication device, the communication channel, or an environment in which the person is located during the dialog, wherein the characteristic does not uniquely identify other than the identity of the person, the identity of the specific communication device, or any user account; and

~~a customization unit to customize the dialog at an application level based on the detected characteristic~~

a call routing unit to select a destination to which the call from the person should be routed, based on the detected characteristic, and not based on the meaning of any speech or the failure to recognize any speech during the dialog.

30. (Canceled)

31. (Currently amended) A method comprising:

examining each of a plurality of audio-based dialogs, each dialog between a person and a machine, to automatically detect a characteristic for at least some of the dialogs, wherein each person uses a communication device to communicate with the machine during the corresponding dialog, and wherein the characteristic ~~is not uniquely indicative of any of: the identity of~~ does not uniquely identify the person, the ~~identity of the~~ communication device, or any user account; and

generating an overall characterization of the dialogs with respect to the characteristic.

32. (Original) A method as recited in claim 31, wherein the overall characterization of the dialogs is a demographic analysis of the dialogs.

33. (Original) A method as recited in claim 31, wherein the characteristic is a characteristic of the person.

34. (Original) A method as recited in claim 33, wherein the characteristic is an approximate age of the person.

35. (Original) A method as recited in claim 33, wherein the characteristic is the gender of the person.

36. (Original) A method as recited in claim 31, wherein the characteristic is a type of speech being spoken by the person.

37. (Original) A method as recited in claim 31, wherein the characteristic is an emotional state of the person.

38. (Original) A method as recited in claim 31, wherein the characteristic is indicative of the truthfulness of speech of the person.

39. (Original) A method as recited in claim 31, wherein the characteristic is an acoustic characteristic.

40. (Original) A method as recited in claim 31, wherein the characteristic is indicative of a speech level of the dialog.

41. (Original) A method as recited in claim 31, wherein the characteristic is indicative of a noise level.

42. (Original) A method as recited in claim 41, wherein the characteristic is indicative of an acoustic noise level.

43. (Original) A method as recited in claim 41, wherein the characteristic is indicative of a signal noise level.

44. (Original) A method as recited in claim 31, wherein the characteristic is descriptive of an environment in which the person is located.

45. (Original) A method as recited in claim 44, wherein the characteristic is an acoustic characteristic.

46. (Original) A method as recited in claim 45, wherein the characteristic is a noise level of an acoustic environment in which the person is located.

47. (Original) A method as recited in claim 44, wherein the characteristic is a noise type of the acoustic environment.

48. (Original) A method as recited in claim 44, wherein the characteristic is the level of reverberance of the acoustic environment.

49. (Original) A method as recited in claim 31, wherein the characteristic is descriptive of a reason the caller is experiencing an error.

50. (Original) A method as recited in claim 31, wherein the characteristic is a type of communication device the person is using to communicate with the machine.

51. (Original) A method as recited in claim 31, wherein the method is implemented in a call routing system, and wherein said customizing the dialog at an application level comprises routing a call from the person based on the detected characteristic.

52. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises customizing an error recovery dialog based on the detected characteristic.

53. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises communicating content customized for the person based on the detected characteristic.

54. (Original) A method as recited in claim 52, wherein the content comprises an advertisement customized for the person.

55. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises customizing a call flow of the dialog for the person.

56. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises customizing a prompt delivery of the dialog for the person.

57. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises customizing a prompt style of the dialog for the person.

58. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises customizing a set of grammars for the dialog for the person.

59. (Original) A method as recited in claim 31, wherein said customizing the dialog at an application level comprises customizing a persona of the machine for the person.

60. (Currently amended) An apparatus comprising:

means for providing a plurality of audio-based dialogs, each between a person and a machine, wherein each person uses a communication device to communicate with the machine during the corresponding dialog;

means for examining each of the dialogs to automatically detect a characteristic for at least some of the dialogs, wherein the characteristic is not uniquely indicative of any of the

~~identity of~~ does not uniquely identify the person, the ~~identity of the specific communication~~
device, or any user account; and

means for generating an overall characterization of the dialogs with respect to the
characteristic.

61. (New) A method comprising:

establishing a speech-based dialog between a person and a machine, wherein the
person uses a communication device to communicate with the machine via a communication
channel during the dialog;

automatically detecting a characteristic during the dialog in real time, wherein the
characteristic is a characteristic of the person, the communication device, the communication
channel, or an environment in which the person is located during the dialog, and wherein the
characteristic does not uniquely identify the person, the communication device, or any user
account; and

dynamically customizing a call flow of the dialog for the person during the dialog, based
on the detected characteristic, and not based on the meaning of any speech or the failure to
recognize any speech during the dialog.

62. (New) A method as recited in claim 61, wherein the characteristic is a characteristic of the
person's speech during the dialog.

63. (New) A method as recited in claim 61, wherein the characteristic is the person's gender or
approximate age.

64. (New) A method as recited in claim 61, wherein the characteristic is the person's emotional
state.

65. (New) A method as recited in claim 61, wherein the characteristic is an acoustic characteristic.

66. (New) A method as recited in claim 61, wherein the characteristic is a type of communication device the person is using to communicate with the machine.